Compliance Component

DEFINITION	
Name	HyperText Transfer Protocol/Secure (HTTP/HTTPS)
Description	The HyperText Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. HyperText Transfer Protocol Secure (HTTPS) is a secure form of HTTP. For purposes of this document any features referred to as HTTP also apply to HTTPS unless specifically noted. HTTP is a generic, stateless, protocol which can be used for many tasks beyond its use for hypertext, such as name servers and distributed object management systems, through extension of its request methods, error codes and header. A feature of HTTP is the typing and negotiation of data representation, allowing systems to be built independently of the data being transferred. The HTTP protocol is a request/response protocol. A client sends a request to the server in the form of a request method, URI, and protocol version, followed by a MIME-like message containing request modifiers, client information, and possible body content over a connection with a server. The server responds with a status line, including the message's protocol version and a success or error code, followed by a MIME-like message containing server information, entity metainformation, and possible entity-body content. HTTP systems are used in corporate intranets over high-bandwidth links, and for access via PDAs with low-power radio links and intermittent connectivity.
Rationale	The state of Missouri needs an efficient standard protocol to transfer data via the Web in either clear text or secure format. HTTP is the most accepted Internet protocol in the industry.
Benefits	• Supports the wide diversity of configurations • Ability to communicate with a wide range of devices and software • High reliability • Widely accepted

ASSOCIATED ARCHITECTURE LEVELS	
Specify the Domain Name	Interoperability
Specify the Discipline Name	Data Exchange
Specify the Technology Area Name	Data Transfer Protocols/Standards
Specify the Product Component Name	

COMPLIANCE COMPONENT TYPE	
Document the Compliance Component Type	Guideline
Component Sub-type	

COMPLIANCE DETAIL

State the Guideline, Standard or Legislation	When agencies are using HTTP for Web data transfers, use HTTP for non-sensitive data and HTTPS for sensitive data. The goal of HTTP is to support the wide diversity of configurations already deployed while introducing protocol constructs that meet the needs of those who build web applications that require high reliability. HTTP communication usually takes place over TCP/IP connections. HTTP can be implemented on top of any other protocol on the Internet, or on other networks. HTTP only presumes a reliable transport; any protocol that provides such guarantees can be used; the mapping of the HTTP request and response structures onto the transport data units of the protocol in question is outside the scope of this guideline. HTTP is a clear text protocol and it is not secure. The default port is TCP 80, but other ports can be used. If secure transmission of data is required then it is recommended using a different protocol (such as HTTPS). HTTPS is a similar protocol that enables encryption for added security. The default port is TCP 443, but other ports can be used. This allows for a more secure form of data transfer.
Document Source Reference #	

Compliance Sources

Name	RFC 2616: Hypertext Transfer Protocol -- HTTP/1.1	*Website*	http://www.w3.org/Protocols/rfc2616/rfc2616.txt
Contact Information	W3C HTTP Working Group		
Name	Internet Engineering Task Force Network Working Group Request for Comments: 2818 HTTP over TLS	*Website*	http://www.ietf.org/rfc/rfc2818.txt
Contact Information			

KEYWORDS

List Keywords	Web, HTTP, HTTPS, secure data, protocol, Internet

COMPONENT CLASSIFICATION

Provide the Classification	☐ *Emerging* ☒ *Current* ☐ *Twilight* ☐ *Sunset*
Sunset Date	

COMPONENT SUB-CLASSIFICATION

Sub-Classification	Date	Additional Sub-Classification Information
☐ *Technology Watch*		
☐ *Variance*		
☐ *Conditional Use*		

Rationale for Component Classification			
Document the Rationale for Component Classification			
Migration Strategy			
Document the Migration Strategy			
Impact Position Statement			
Document the Position Statement on Impact			
CURRENT STATUS			
Provide the Current Status	☐ *In Development* ☐ *Under Review* ☒ *Approved* ☐ *Rejected*		
AUDIT TRAIL			
Creation Date	11/24/04	*Date Approved / Rejected*	12/22/04
Reason for Rejection			
Last Date Reviewed		*Last Date Updated*	
Reason for Update			